

**APPENDIX A**  
**TEST PIT & BORING LOGS**



# LOG OF TEST PIT TP-01

Name Potlatch/Avery Landing/Idaho

Location T45N, R5E Section 16

Temp 80 °F Weather Sunny

Equipment CAT 315C

Elevation \_\_\_\_\_

Date 08-27-09

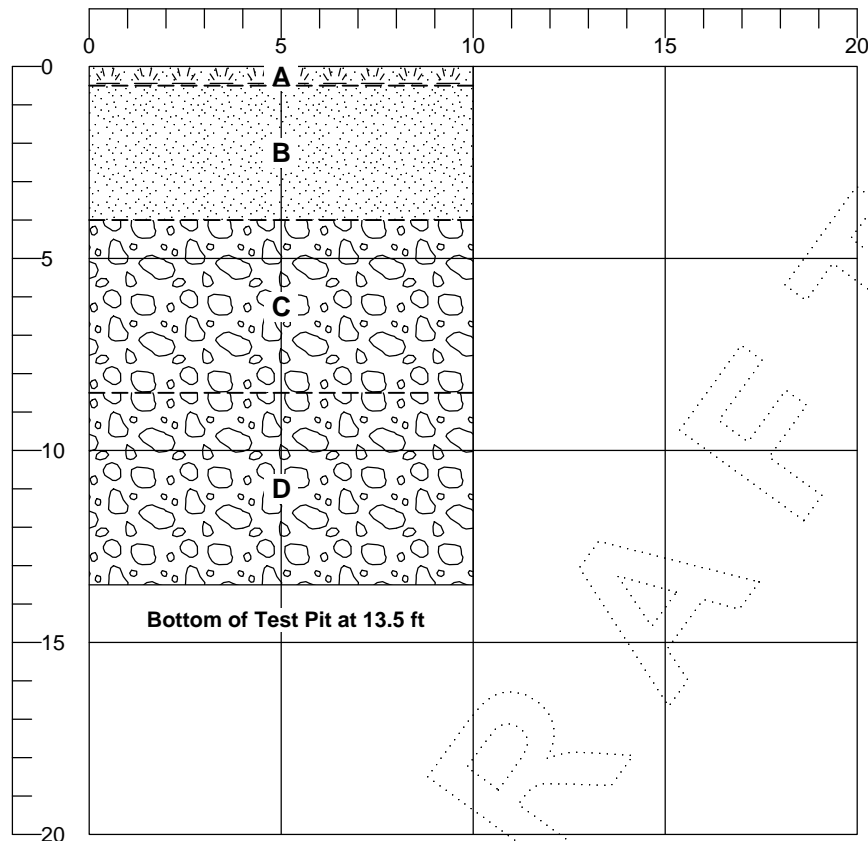
Contractor Able Clean-up

Job 073-93312-03

Datum NAVD 88

Logged by F. Ishihara

Operator C. Smith



SAMPLES			
NO.	DEPTH (ft)	MOISTURE (%)	
1	2.5		
2	5.0		
3	7.5		
4	10.0		
5	12.5		
TEST RESULTS			
DEPTH	WD	DD	% PASSING #200

## LITHOLOGIC DESCRIPTIONS AND EXCAVATION NOTES

**A** 0.0 - 0.5 ft: Compact, brown, silty SAND, some organics, dry. (SM) (TOPSOIL)

**B** 0.5 - 4.0 ft: Compact, dark grey, angular, gravelly SAND, little silt and cobbles, dry. (SP) (FILL)\*

\*Black stained soil encountered at approximately 2' bgs.

**C** 4.0 - 8.5 ft: Compact, brown, sandy, angular GRAVEL, little silt and cobbles, damp to moist. (GP) (FILL)

**D** 8.5 - 13.5 ft: Compact, dark grey to black, rounded GRAVEL and COBBLES, trace silt and sand, damp. (GP) (ALLUVIUM)

TIME	DEPTH TO W/L (FT)	NOTES
10:10	13.5	
<b>SPECIAL NOTES:</b>		
Groundwater encountered at approximately 13.5 ft bgs.		
Petroleum-like odor begins at approximately 10' bgs.		
Tree stump at bottom of test pit.		
All excavated soil was placed back in test pit.		



# LOG OF TEST PIT TP-02

Name Potlatch/Avery Landing/Idaho

Location T45N, R5E Section 16

Temp 80 °F Weather Sunny

Equipment CAT 315C

Elevation \_\_\_\_\_

Date 08-27-09

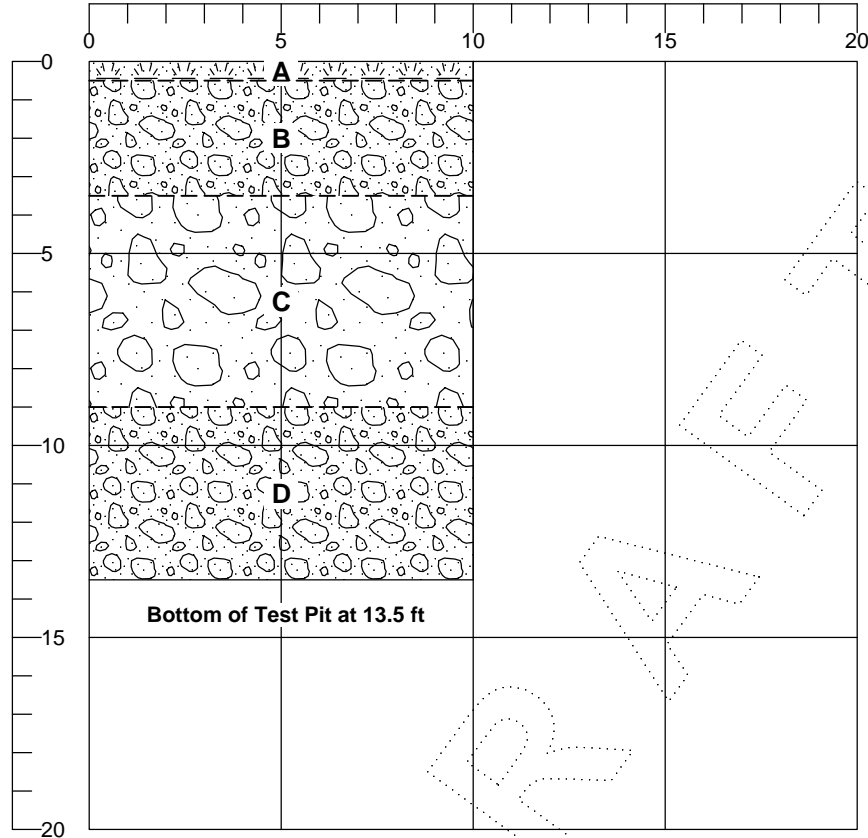
Contractor Able Clean-up

Job 073-93312-03

Datum NAVD 88

Logged by F. Ishihara

Operator C. Smith



SAMPLES			
NO.	DEPTH (ft)	MOISTURE (%)	
1	2.5		
2	5.0		
3	8.0		
4	10.0		
5	12.5		
6	13.0		
TEST RESULTS			
DEPTH	WD	DD	% PASSING #200

## LITHOLOGIC DESCRIPTIONS AND EXCAVATION NOTES

- A** 0.0 - 0.5 ft: Compact, brown, silty SAND, some organics, dry. (SM) (TOPSOIL)
- B** 0.5 - 3.5 ft: Compact, dark brown, angular, gravelly SAND, some cobbles, trace silt and debris (including beer cans), dry. (GP) (FILL)
- C** 3.5 - 9.0 ft: Compact, brown, angular GRAVEL, some sand and cobbles, trace silt, moist. (GP) (FILL)
- D** 9.0 - 13.5 ft: Compact, brown, sandy, angular GRAVEL, some angular cobbles, moist. (GP) (FILL)

TIME	DEPTH TO W/L (FT)	NOTES
12:20	13.5	
<b>SPECIAL NOTES:</b> Groundwater encountered at approximately 13.5 ft bgs.  No visibly impacted media.		



# LOG OF TEST PIT TP-03

Name Potlatch/Avery Landing/Idaho

Location T45N, R5E Section 16

Temp 80 °F Weather Sunny

Equipment CAT 315C

Elevation \_\_\_\_\_

Date 08-27-09

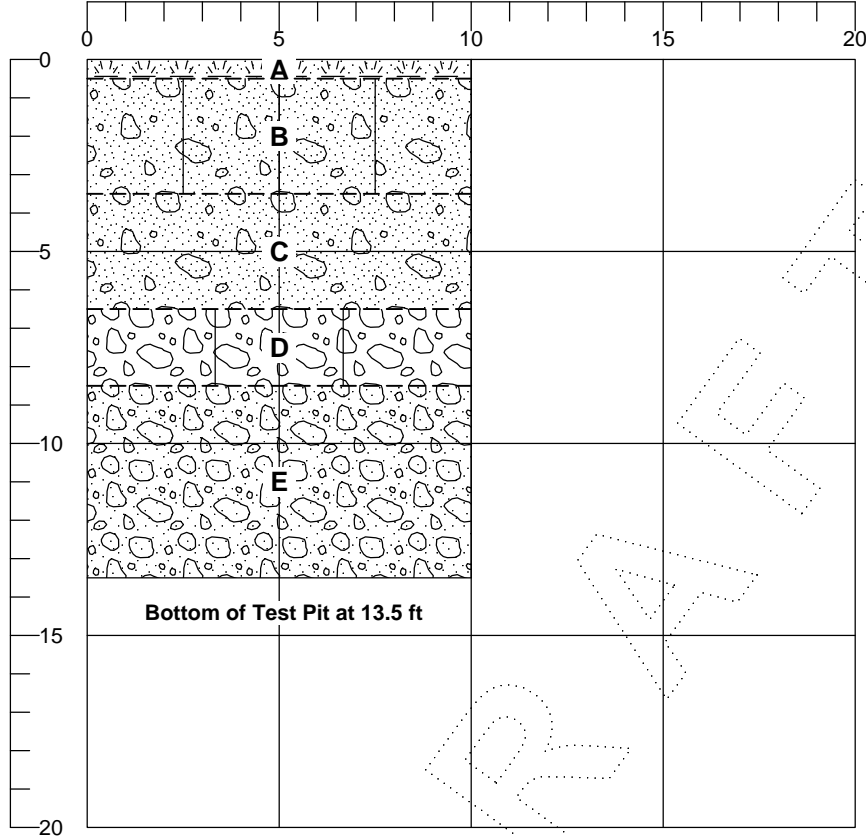
Contractor Able Clean-up

Job 073-93312-03

Datum NAVD 88

Logged by F. Ishihara

Operator C. Smith



SAMPLES			
NO.	DEPTH (ft)	MOISTURE (%)	
1	2.5		
2	5.0		
3	7.5		
4	11.0		
5	13.5		
TEST RESULTS			
DEPTH	WD	DD	% PASSING #200

## LITHOLOGIC DESCRIPTIONS AND EXCAVATION NOTES

- A** 0.0 - 0.5 ft: Compact, brown, silty SAND, some organics, dry. (SM) (TOPSOIL)
- B** 0.5 - 3.5 ft: Compact, dark grey, silty SAND, some angular gravel, cobbles and organic material, damp. (SM) (FILL)
- C** 3.5 - 6.5 ft: Compact, black, silty SAND, some wood chips, trace gravel, moist. (SP) (FILL)
- D** 6.5 - 8.5 ft: Compact, dark brown, sandy, rounded GRAVEL, some silt, moist to wet. (GP-GM) (ALLUVIUM)
- E** 8.5 - 13.5 ft: Compact, brown, sandy, rounded GRAVEL, some silt and cobbles, moist to wet. (GP) (ALLUVIUM)

TIME	DEPTH TO W/L (FT)	NOTES
15:07	13.5	
<b>SPECIAL NOTES:</b>		
Groundwater encountered at approximately 13.5 ft bgs.		
Faint oil-like odor at approximately 11' bgs. Oil-like staining at approximately 13' bgs.		
Petroleum-like sheen and droplets of oil-like product observed on water table.		



# LOG OF TEST PIT TP-04

Name Potlatch/Avery Landing/Idaho

Location T45N, R5E Section 16

Temp 80 °F Weather Sunny

Equipment CAT 315C

Elevation \_\_\_\_\_

Date 08-27-09

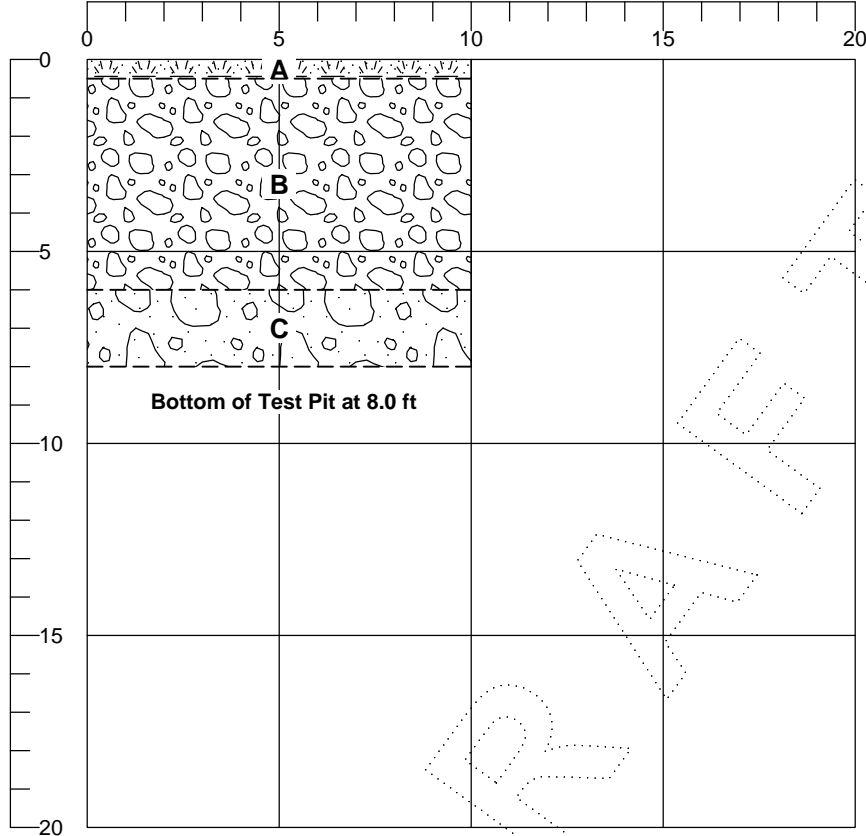
Contractor Able Clean-up

Job 073-93312-03

Datum NAVD 88

Logged by F. Ishihara

Operator C. Smith



SAMPLES			
NO.	DEPTH (ft)	MOISTURE (%)	
1	2.5		
2	5.0		
3	8.0		
TEST RESULTS			
DEPTH	WD	DD	% PASSING #200

## LITHOLOGIC DESCRIPTIONS AND EXCAVATION NOTES

- A** 0.0 - 0.5 ft: Compact, brown, silty SAND, some gravel and organics, dry. (SM) (FILL)
- B** 0.5 - 6.0 ft: Compact, brown, sandy angular to rounded GRAVEL and COBBLES, trace silt, dry. (GP) (FILL)
- C** 6.0 - 8.0 ft: Compact, grey, sandy GRAVEL and COBBLES, moist to wet. (GP) (ALLUVIUM)

TIME	DEPTH TO W/L (FT)	NOTES
16:20	8.0	
<b>SPECIAL NOTES:</b>		
Groundwater encountered at approximately 8 ft bgs.		
No impacted media observed.		



# LOG OF TEST PIT TP-05

Name Potlatch/Avery Landing/Idaho

Location T45N, R5E Section 16

Temp 80 °F Weather Sunny

Equipment CAT 315C

Elevation \_\_\_\_\_

Date 08-27-09

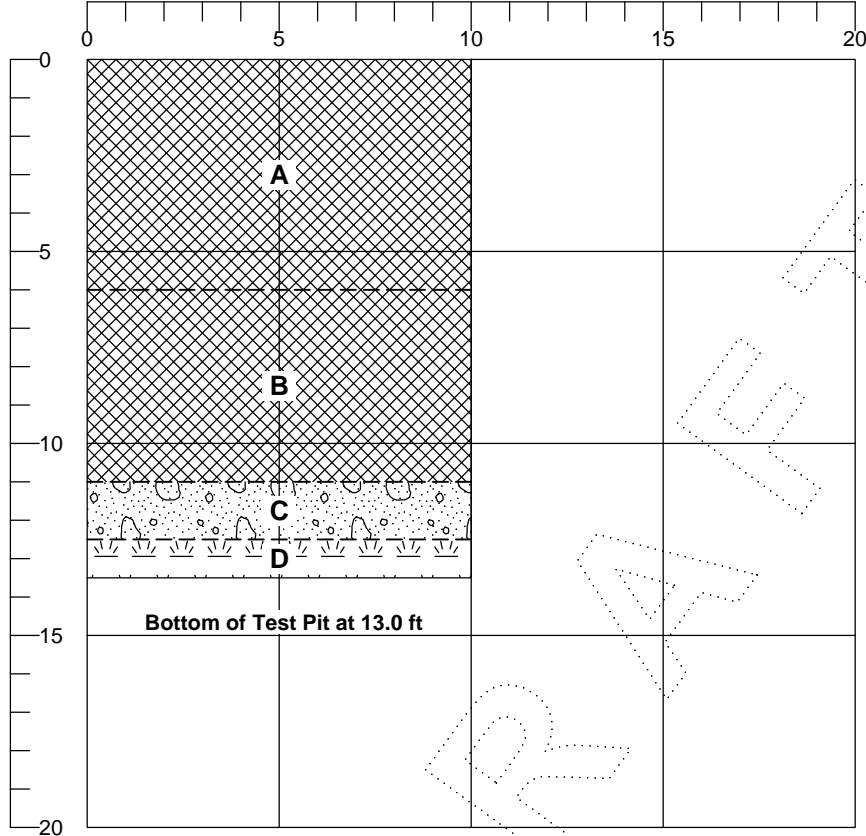
Contractor Able Clean-up

Job 073-93312-03

Datum NAVD 88

Logged by F. Ishihara

Operator C. Smith



SAMPLES			
NO.	DEPTH (ft)	MOISTURE (%)	
1	2.5		
2	5.0		
3	7.5		
4	10.5		
5	11.0		
6	13.0		
TEST RESULTS			
DEPTH	WD	DD	% PASSING #200

## LITHOLOGIC DESCRIPTIONS AND EXCAVATION NOTES

- A** 0.0 - 6.0 ft: Compact, brown, angular GRAVEL and COBBLES, little sand and debris (chunks of concrete), trace silt, damp. (GP) (FILL)
- B** 6.0 - 11.0 ft: Loose, black WOOD CHIPS, some gravel and cobbles, damp. (WOOD DEBRIS)
- C** 11.0 - 12.5 ft: Loose, grey SAND and rounded GRAVEL, trace silt, moist. (SP)
- D** 12.5 - 13.5 ft: Loose, black WOOD CHIPS, damp. (WOOD DEBRIS)

Test pit re-excavated approximately 40' east. Logs were encountered again at the new location.

TIME	DEPTH TO W/L (FT)	NOTES
09:30	11.0	
<b>SPECIAL NOTES:</b>		
Groundwater encountered at approximately 11 ft bgs.		
No impacted media encountered.		
Bucket refusal at approximately 13 ft bgs on large pieces of timber.		



# LOG OF TEST PIT TP-05N

Name Potlatch/Avery Landing/Idaho

Location T45N, R5E Section 16

Temp 80 °F Weather Sunny

Equipment CAT 315C

Elevation \_\_\_\_\_

Date 08-28-09

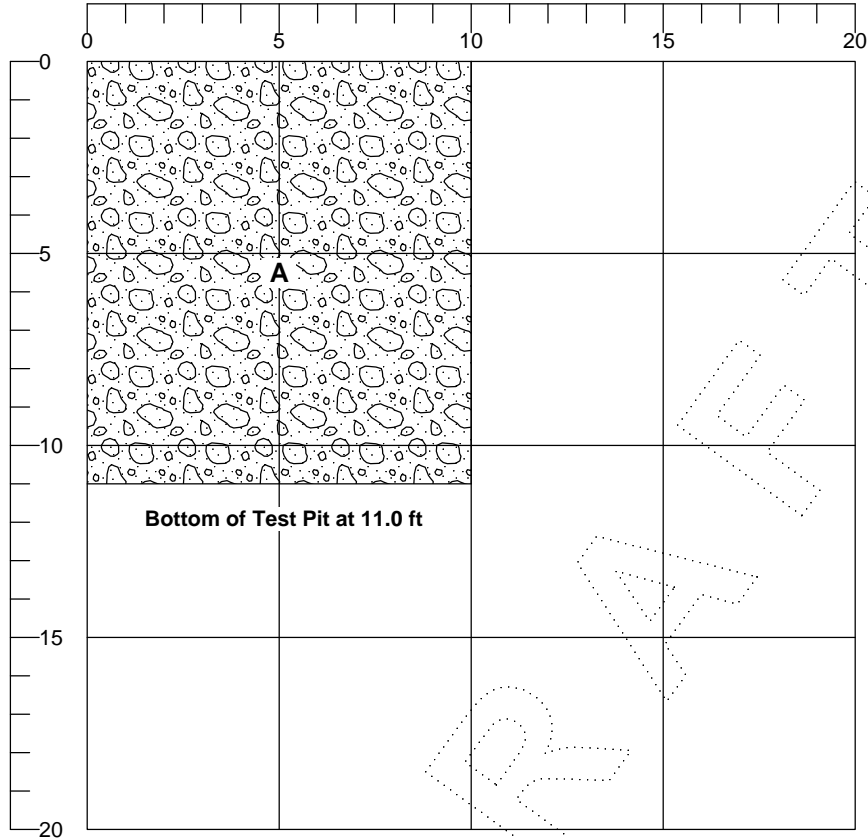
Contractor Able Clean-up

Job 073-93312-03

Datum NAVD 88

Logged by F. Ishihara

Operator C. Smith



SAMPLES			
NO.	DEPTH (ft)	MOISTURE (%)	
TEST RESULTS			
DEPTH	WD	DD	% PASSING #200

## LITHOLOGIC DESCRIPTIONS AND EXCAVATION NOTES

**A** 0.0 - 11.0 ft: Loose, brown, sandy GRAVEL, little cobbles and organics (including wood chips and 30" diameter logs), dry to moist. (GP) (FILL)

TIME	DEPTH TO W/L (FT)	NOTES
<b>SPECIAL NOTES:</b>		
No groundwater encountered.		
Bucket refusal at approximately 11 ft bgs on large pieces of timber.		



# LOG OF TEST PIT TP-06

Name Potlatch/Avery Landing/Idaho

Location T45N, R5E Section 16

Temp 80 °F Weather Sunny

Equipment CAT 315C

Elevation \_\_\_\_\_

Date 08-28-09

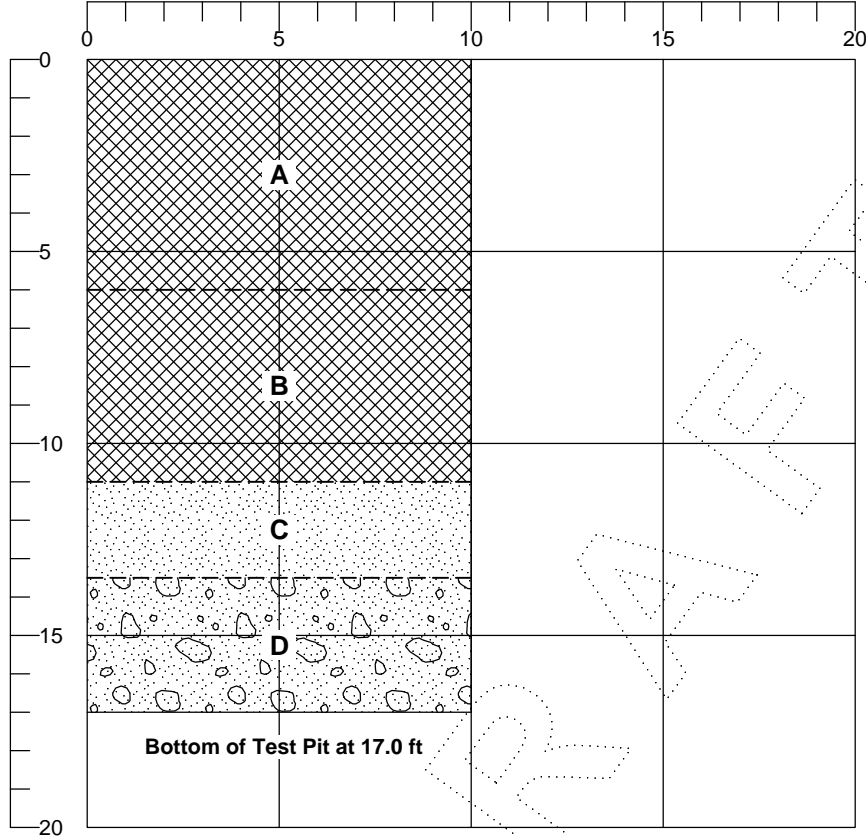
Contractor Able Clean-up

Job 073-93312-03

Datum NAVD 88

Logged by F. Ishihara

Operator C. Smith



SAMPLES			
NO.	DEPTH (ft)	MOISTURE (%)	
1	2.5		
2	5.0		
3	7.5		
4	10.0		
5	12.5		
6	15.0		
7	17.0		
TEST RESULTS			
DEPTH	WD	DD	% PASSING #200

## LITHOLOGIC DESCRIPTIONS AND EXCAVATION NOTES

- A** 0.0 - 6.0 ft: Compact, brown, angular GRAVEL, some cobbles, trace sand, dry to damp. (GP) (FILL)
- B** 6.0 - 11.0 ft: Loose, black WOOD CHIPS, little gravel and cobbles, damp. (WOOD DEBRIS)
- C** 11.0 - 13.5 ft: Loose, brown SAND, little organics, moist. (SP)
- D** 13.5 - 17.0 ft: Loose, dark brown SAND, little rounded gravel, moist to wet. (SP) (ALLUVIUM)

TIME	DEPTH TO W/L (FT)	NOTES
	17.0	

## SPECIAL NOTES:

Groundwater encountered at approximately 17 ft bgs.

Fuel-like odor encountered at approximately 8' bgs, increasing in intensity with depth.

Oily product globules encountered at approximately 17' bgs.





# LOG OF TEST PIT TP-07

Name Potlatch/Avery Landing/Idaho

Location T45N, R5E Section 16

Temp 80 °F Weather Sunny

Equipment CAT 315C

Elevation \_\_\_\_\_

Date 08-28-09

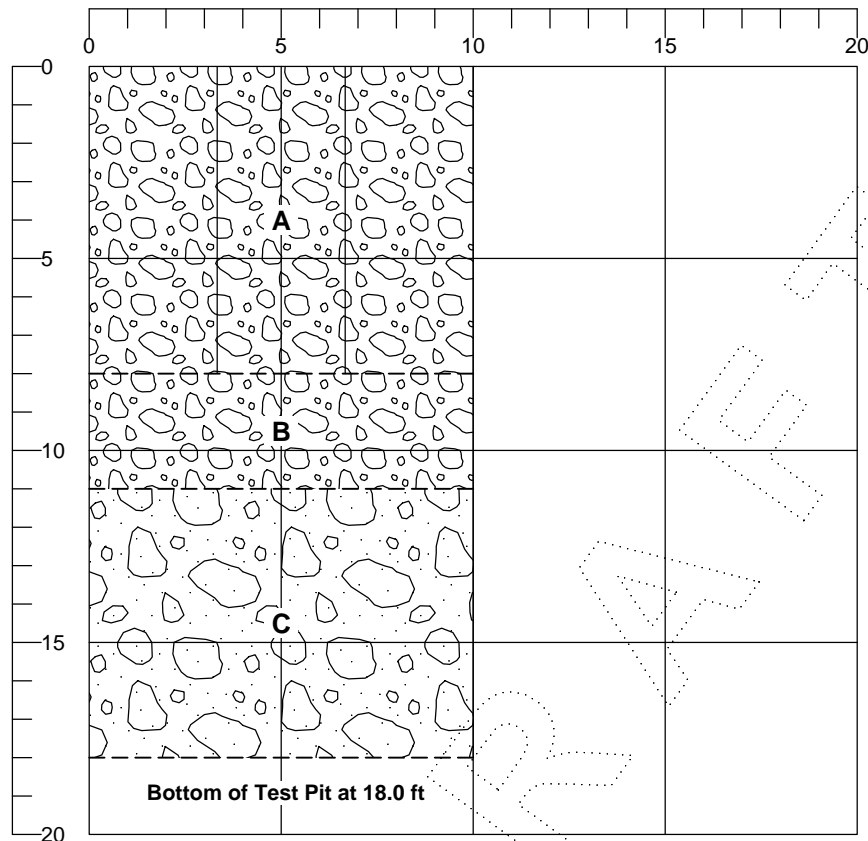
Contractor Able Clean-up

Job 073-93312-03

Datum NAVD 88

Logged by F. Ishihara

Operator C. Smith



SAMPLES			
NO.	DEPTH (ft)	MOISTURE (%)	
1	2.5		
2	5.0		
3	7.5		
4	10.0		
5	12.5		
6	18.0		
TEST RESULTS			
DEPTH	WD	DD	% PASSING #200

## LITHOLOGIC DESCRIPTIONS AND EXCAVATION NOTES

- A** 0.0 - 8.0 ft: Compact, brown, angular GRAVEL, some sand, silt, cobbles, and boulders, dry. (GM) (FILL)
- B** 8.0 - 11.0 ft: Compact, brown, angular GRAVEL and COBBLES, little boulders, dry. (GP) (FILL)
- C** 11.0 - 18.0 ft: Compact, grey SAND and rounded GRAVEL, trace silt and cobbles, moist. (GP) (ALLUVIUM)

TIME	DEPTH TO W/L (FT)	NOTES
14:00	18.0	
<b>SPECIAL NOTES:</b>		
Groundwater encountered at approximately 18 ft bgs.		
No impacted media observed.		



# LOG OF TEST PIT TP-08

Name Potlatch/Avery Landing/Idaho

Location T45N, R5E Section 16

Temp 80 °F Weather Sunny

Equipment CAT 315C

Elevation \_\_\_\_\_

Date 08-28-09

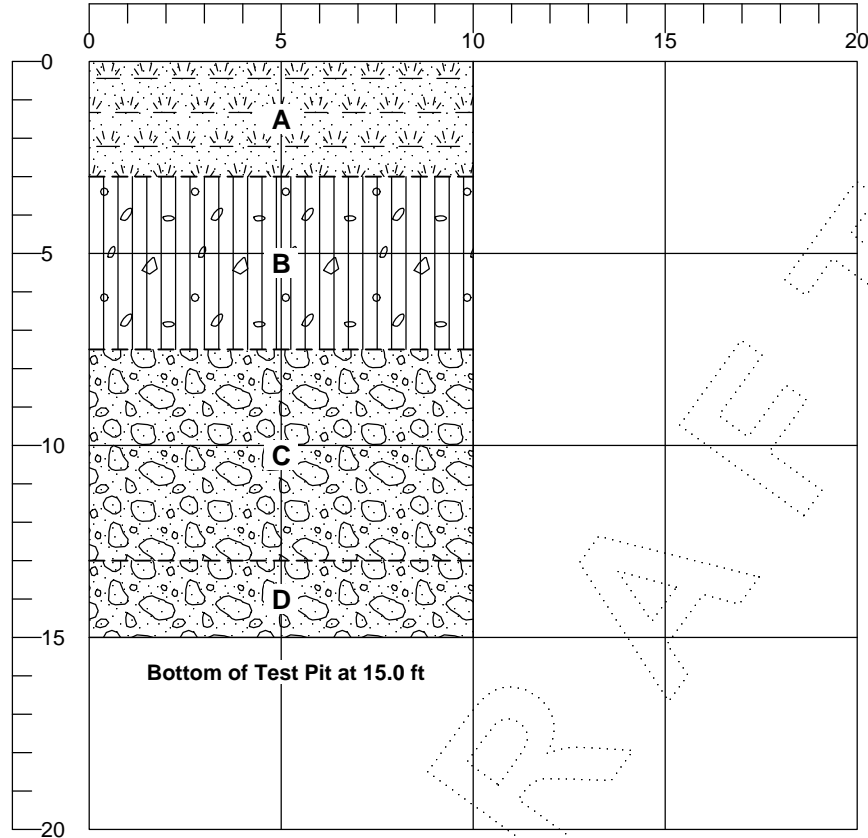
Contractor Able Clean-up

Job 073-93312-03

Datum NAVD 88

Logged by F. Ishihara

Operator C. Smith



SAMPLES			
NO.	DEPTH (ft)	MOISTURE (%)	
1	2.5		
2	5.0		
3	7.5		
4	10.0		
5	12.5		
6	14.0		
7	15.0		
TEST RESULTS			
DEPTH	WD	DD	% PASSING #200

## LITHOLOGIC DESCRIPTIONS AND EXCAVATION NOTES

- A** 0.0 - 3.0 ft: Compact, brown, silty SAND, some organics, little angular gravel, dry. (SM) (TOPSOIL)
- B** 3.0 - 7.5 ft: Loose, brown to black ORGANICS and WOOD CHIPS, little angular gravel, damp. (WOOD DEBRIS)
- C** 7.5 - 13.0 ft: Loose, dark brown, sandy, angular to rounded GRAVEL, trace silt and brick fragments, moist. (GP)
- D** 13.0 - 15.0 ft: Loose, grey, sandy, rounded GRAVEL, trace silt, moist to wet. (GP) (ALLUVIUM)

TIME	DEPTH TO W/L (FT)	NOTES
15:00	14.0	
<b>SPECIAL NOTES:</b>		
Groundwater encountered at approximately 14 ft bgs.		
Impacted, stained soil observed from approximately 3' bgs to water table.		
Strong petroleum-like odor below 13' bgs.		
Petroleum-like globules of material floating on water table at approximately 14' bgs.		



# LOG OF TEST PIT TS-01

Name Potlatch/Avery Landing/Idaho

Location T45N, R5E Section 15

Temp 80 °F Weather Sunny

Equipment CAT 315C

Elevation \_\_\_\_\_

Date 08-25-09

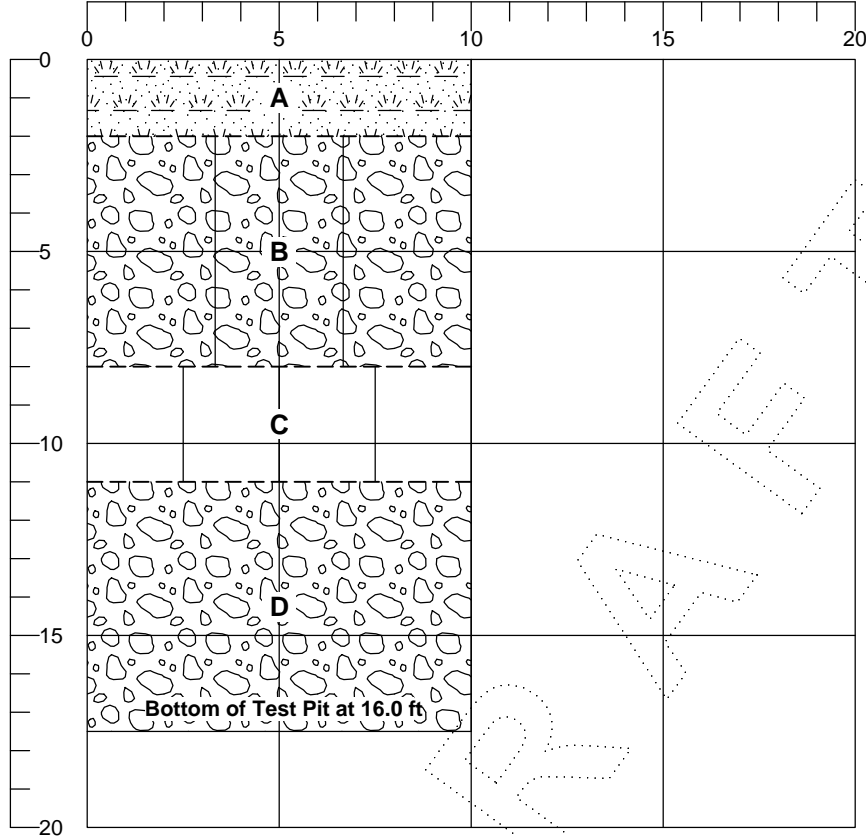
Contractor Able Clean-up

Job 073-93312-03

Datum NAVD 88

Logged by F. Ishihara

Operator C. Smith



SAMPLES			
NO.	DEPTH (ft)	MOISTURE (%)	
1	1.0		
2	3.5		
3	7.5		
4	10.0		
5	12.5		
6	15.0		
7	17.5		
TEST RESULTS			
DEPTH	WD	DD	% PASSING #200

## LITHOLOGIC DESCRIPTIONS AND EXCAVATION NOTES

**A** 0.0 - 2.0 ft: Compact, brown, silty SAND, some organics, trace angular gravel; dry. (SM) (TOPSOIL)

**B** 2.0 - 8.0 ft: Compact, brown, silty, angular GRAVEL, little sand, damp. (GM) (FILL)\*

\*Black wedge of contaminated soil at approximately 4 feet.

**C** 8.0 - 11.0 ft: Loose, brown SILT, some sand, damp. (ML)

**D** 11.0 - 17.5 ft: Loose, grey, rounded GRAVEL, some sand increasing with depth, damp to wet. (GP) (ALLUVIUM)\*

\* Soil is oil coated, increasing with depth.

TIME	DEPTH TO W/L (FT)	NOTES
	17.5	

## SPECIAL NOTES:

Groundwater encountered at approximately 15 ft bgs.

Strong petroleum-like odor on samples beginning at approximately 10 ft bgs.

Oil coated soil encountered at 14', increasing in amount of oily product with depth.

Approximately 3" diameter metal pipe encountered at approximately 2'.



# LOG OF TEST PIT TS-02

Name Potlatch/Avery Landing/Idaho

Location T45N, R5E Section 15

Temp 80 °F Weather Sunny

Equipment CAT 315C

Elevation \_\_\_\_\_

Date 08-25-09

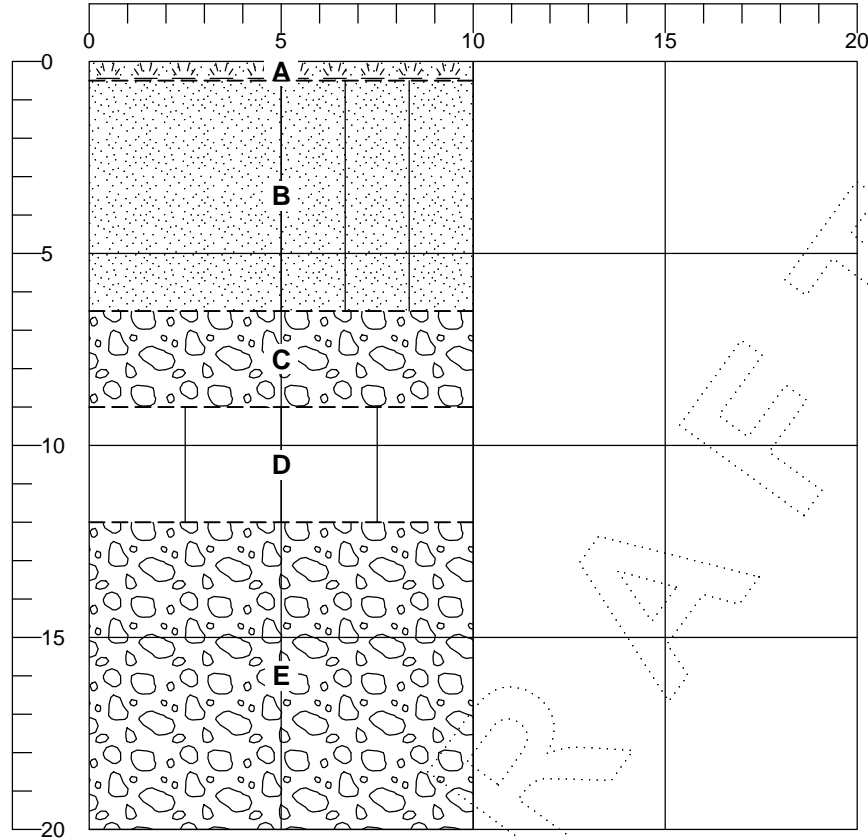
Contractor Able Clean-up

Job 073-93312-03

Datum NAVD 88

Logged by F. Ishihara

Operator C. Smith



Bottom of Test Pit at 20.0 ft

SAMPLES			
NO.	DEPTH (ft)	MOISTURE (%)	
1	2.5		
2	5.0		
3	8.5		
4	10.0		
5	12.5		
6	15.0		
TEST RESULTS			
DEPTH	WD	DD	% PASSING #200

## LITHOLOGIC DESCRIPTIONS AND EXCAVATION NOTES

- A** 0.0 - 0.5 ft: Compact, brown, silty SAND, some angular gravel and organics, dry. (SM) (FILL)
- B** 0.5 - 6.5 ft: Compact, grey, SAND, some angular gravel and silt, dry. (SP-SM) (FILL)
- C** 6.5 - 9.0 ft: Compact, brown, angular GRAVEL, some sand, little silt, moist. (GP) (FILL)
- D** 9.0 - 12.0 ft: Loose, brown SILT, moist. (ML)
- E** 12.0 - 20.0 ft: Loose, grey, rounded GRAVEL, some sand, wet. (GP) (ALLUVIUM)\*

\*Soil coloring appeared to indicate petroleum staining.

TIME	DEPTH TO W/L (FT)	NOTES
	19.0	
<b>SPECIAL NOTES:</b>		
Groundwater encountered at approximately 19 ft bgs.		
Wedge of black stained soil at 1.5-2' bgs.		
Strong petroleum-like odor on samples below 8.5 ft bgs.		
Approximately 12" diameter pipe encountered at approximately 6.5'.		



# LOG OF TEST PIT TS-03

Name Potlatch/Avery Landing/Idaho

Location T45N, R5E Section 15

Temp 80 °F Weather Sunny

Equipment CAT 315C

Elevation \_\_\_\_\_

Date 08-25-09

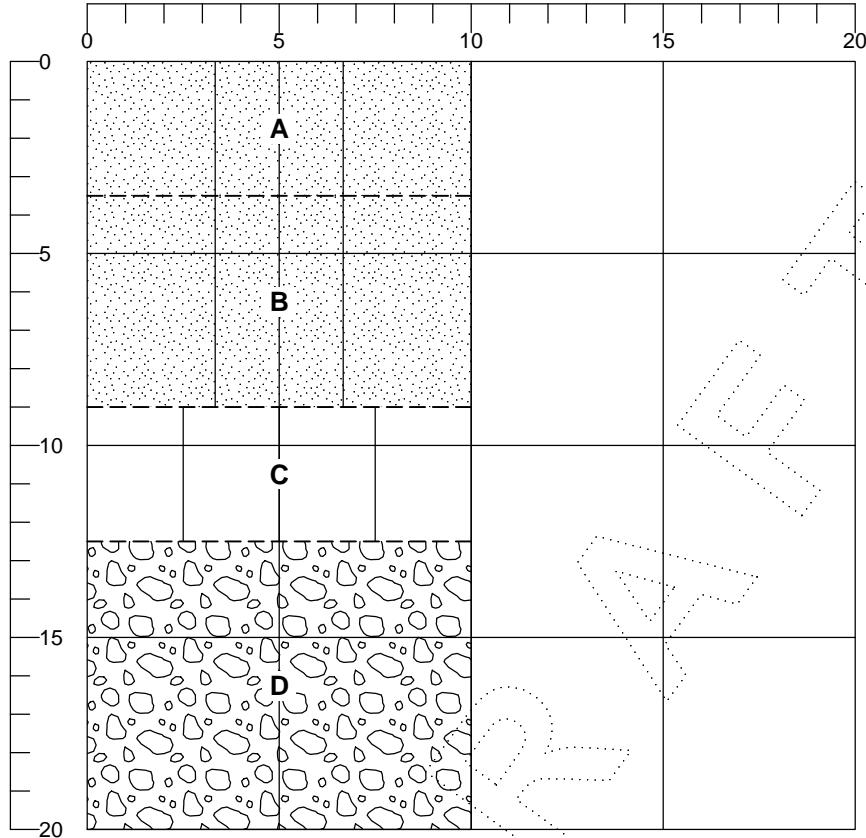
Contractor Able Clean-up

Job 073-93312-03

Datum NAVD 88

Logged by F. Ishihara

Operator C. Smith



Bottom of Test Pit at 20.0 ft

SAMPLES			
NO.	DEPTH (ft)	MOISTURE (%)	
1	2.5		
2	5.0		
3	7.5		
4	10.5		
5	13.0		
6	14.5		
7	17.5		
TEST RESULTS			
DEPTH	WD	DD	% PASSING #200

## LITHOLOGIC DESCRIPTIONS AND EXCAVATION NOTES

**A** 0.0 - 3.5 ft: Compact, grey, silty SAND, some angular gravel, dry. (SM) (FILL)

**B** 3.5 - 9.0 ft: Compact, dark brown to black, silty SAND, some angular gravel, dry. (SM) (FILL)\*

\*Soil appeared stained.

**C** 9.0 - 12.5 ft: Loose, brown to black SILT, moist. (ML)

**D** 12.5 - 20.0 ft: Loose, grey, rounded GRAVEL, some sand, wet. (GP) (ALLUVIUM)\*

\*Soil color appeared stained.

TIME	DEPTH TO W/L (FT)	NOTES
	18.0	

## SPECIAL NOTES:

Groundwater encountered at approximately 18 ft bgs.

Soil appeared impacted from 3' bgs to bottom of test pit.

Strong petroleum-like odor on samples below 10.5 ft bgs.

Gravel appeared saturated with an oily product.



# LOG OF TEST PIT TS-04

Name Potlatch/Avery Landing/Idaho

Location T45N, R5E Section 16

Temp 80 °F Weather Sunny

Equipment CAT 315C

Elevation \_\_\_\_\_

Date 08-26-09

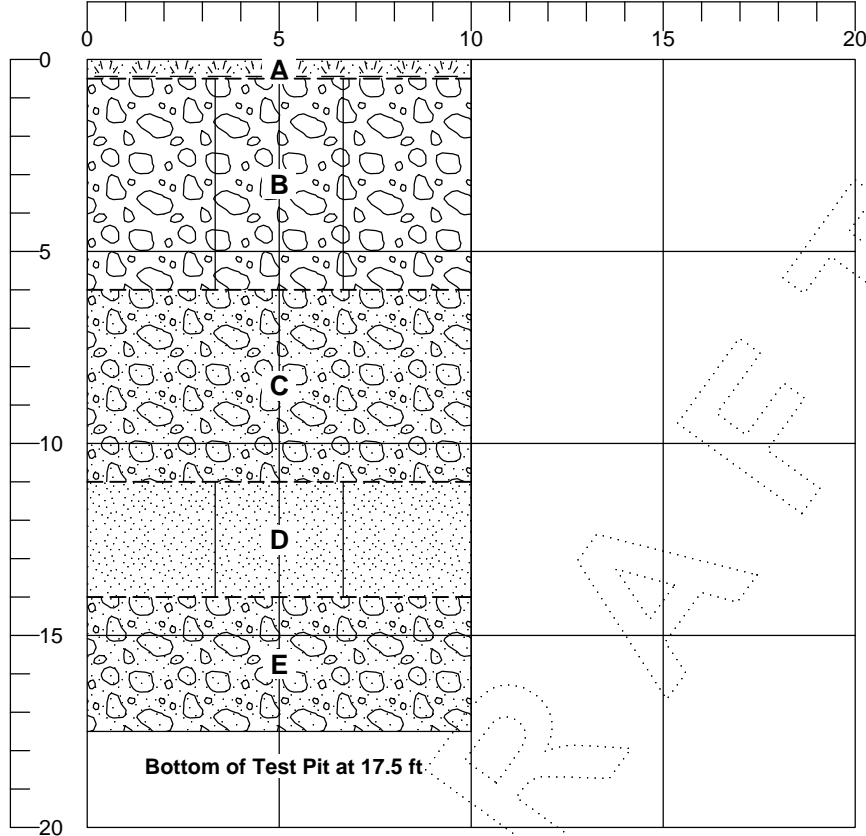
Contractor Able Clean-up

Job 073-93312-03

Datum NAVD 88

Logged by F. Ishihara

Operator C. Smith



SAMPLES			
NO.	DEPTH (ft)	MOISTURE (%)	
1	2.5		
2	5.0		
3	7.5		
4	10.0		
5	12.5		
6	13.0		
7	15.0		
8	TEST RESULTS		
DEPTH	WD	DD	% PASSING #200

## LITHOLOGIC DESCRIPTIONS AND EXCAVATION NOTES

- A** 0.0 - 0.5 ft: Compact, brown, silty SAND, some angular gravel and organics; dry. (SM) (TOPSOIL)
- B** 0.5 - 6.0 ft: Compact, grey, angular GRAVEL, some sand and silt, dry. (GP-GM) (FILL)
- C** 6.0 - 11.0 ft: Compact, brown, angular to rounded GRAVEL, some sand, trace silt, moist. (GP)
- D** 11.0 - 14.0 ft: Loose, brown to grey, silty SAND, little rounded gravel, moist. (SM)
- E** 14.0 - 17.5 ft: Loose, grey to black, sandy, rounded GRAVEL, wet. (GP) (ALLUVIUM)

TIME	DEPTH TO W/L (FT)	NOTES
	16.0	
SPECIAL NOTES:		
Groundwater encountered at approximately 16 ft bgs.		
Oil-like odor beginning at approximately 7.5' bgs.		
Clay pipe encountered at approximately 8 ft bgs.		
Soil appeared impacted below 12' bgs.		



# LOG OF TEST PIT TS-05

Name Potlatch/Avery Landing/Idaho

Location T45N, R5E Section 16

Temp 80 °F Weather Sunny

Equipment CAT 315C

Elevation \_\_\_\_\_

Date 08-26-09

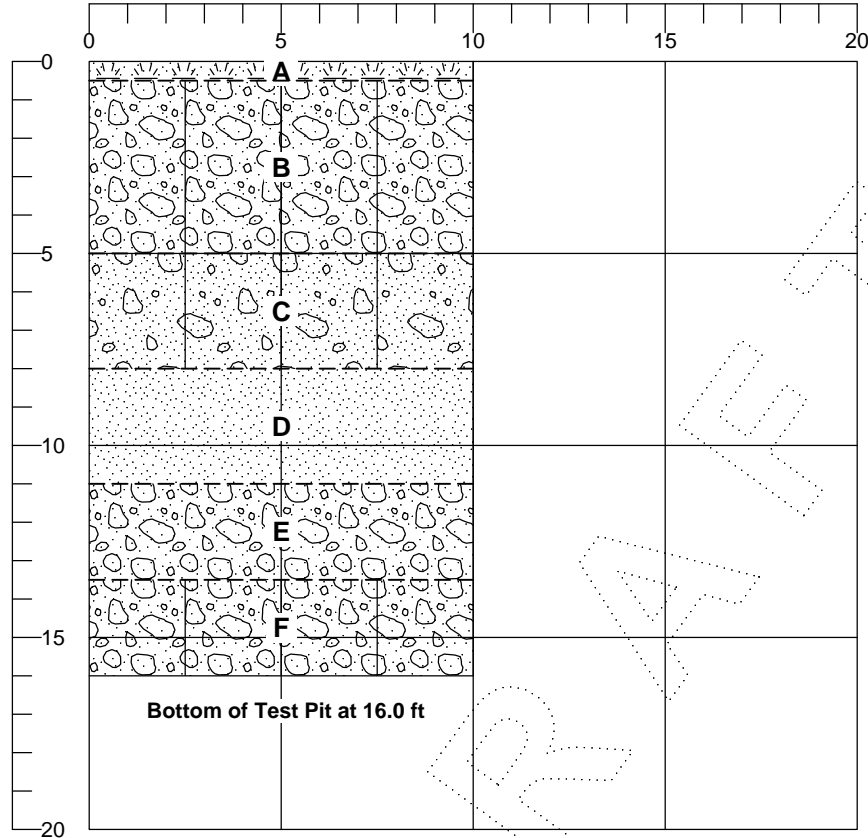
Contractor Able Clean-up

Job 073-93312-03

Datum NAVD 88

Logged by F. Ishihara

Operator C. Smith



SAMPLES			
NO.	DEPTH (ft)	MOISTURE (%)	
1	2.5		
2	5.0		
3	7.5		
4	10.0		
5	12.5		
6	15.0		
7	17.5		
8	TEST RESULTS		
DEPTH	WD	DD	% PASSING #200

## LITHOLOGIC DESCRIPTIONS AND EXCAVATION NOTES

- A** 0.0 - 0.5 ft: Compact, brown, silty SAND, some gravel and organics, dry. (SM) (FILL)
- B** 0.5 - 5.0 ft: Compact, grey, silty, angular to rounded GRAVEL, some sand, dry to damp. (GM) (FILL)
- C** 5.0 - 8.0 ft: Compact, black, silty SAND, little angular gravel and wood debris, damp. (SM) (FILL)
- D** 8.0 - 11.0 ft: Compact, brown SAND, trace silt, damp. (SP)
- E** 11.0 - 13.5 ft: Loose, brown, angular GRAVEL, some sand, moist. (GP) (FILL)
- F** 13.5 - 16.0 ft: Compact, black and brown, silty, rounded GRAVEL, some sand, wet. (GM) (ALLUVIUM)

TIME	DEPTH TO W/L (FT)	NOTES

## SPECIAL NOTES:

No groundwater encountered.

Approximately 3" diameter PVC pipe encountered at approximately 7'.

Tree trunks, railroad ties, and wood beams encountered at approximately 10 ft bgs.



# LOG OF TEST PIT TS-06

Name Potlatch/Avery Landing/Idaho

Location T45N, R5E Section 16

Temp 80 °F Weather Sunny

Equipment CAT 315C

Elevation \_\_\_\_\_

Date 08-26-09

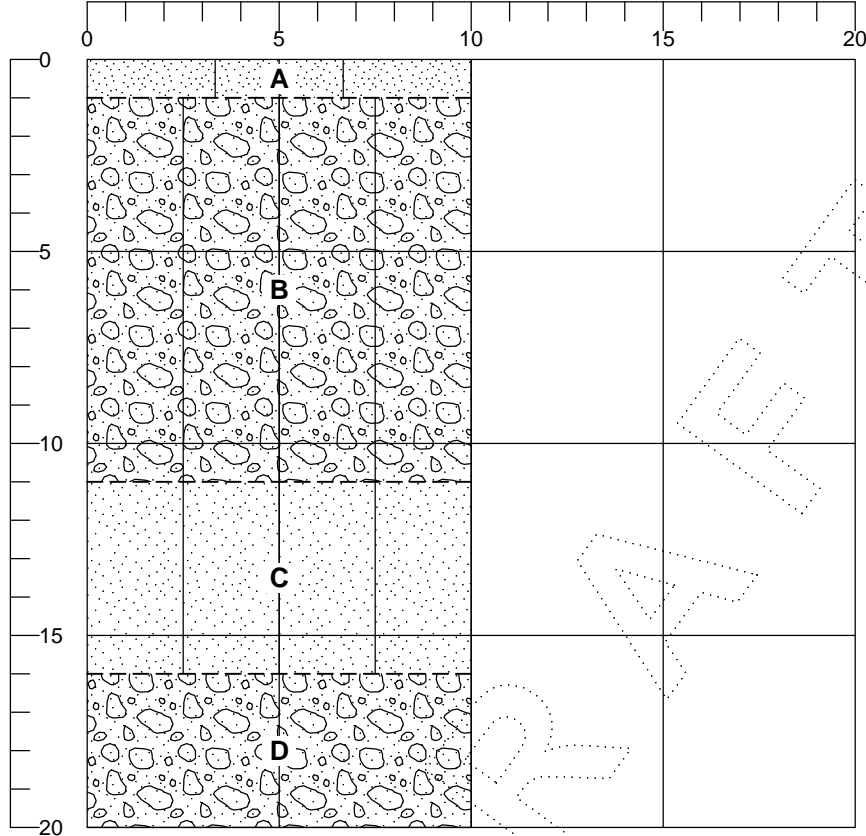
Contractor Able Clean-up

Job 073-93312-03

Datum NAVD 88

Logged by F. Ishihara

Operator C. Smith



Bottom of Test Pit at 20.0 ft

SAMPLES		
NO.	DEPTH (ft)	MOISTURE (%)
1	2.5	
2	5.0	
3	7.5	
4	10.0	
5	12.5	
6	15.0	
7	17.5	
8	TEST RESULTS	
DEPTH	WD	DD
		% PASSING #200

## LITHOLOGIC DESCRIPTIONS AND EXCAVATION NOTES

- A** 0.0 - 1.0 ft: Compact, grey, silty SAND, some gravel, dry. (SM) (TOPSOIL)
- B** 1.0 - 11.0 ft: Compact, brown, silty, angular GRAVEL, some sand and trace cobbles, dry. (GM) (FILL)
- C** 11.0 - 16.0 ft: Loose, brown to black, sandy SILT, trace rounded gravel and cobbles, moist. (ML)
- D** 16.0 - 20.0 ft: Loose, blue/black, sandy, rounded GRAVEL, trace silt and cobbles, moist. (GP) (ALLUVIUM)

TIME	DEPTH TO W/L (FT)	NOTES
	20.0	

## SPECIAL NOTES:

Groundwater encountered at approximately 20 ft bgs.

Impacted material and stained soil beginning at 12' bgs.

Heavy oil staining at approximately 14' bgs.

Oily product appeared very viscous. Some free product visible on cobbles and boulders.



# RECORD OF BOREHOLE BH-01

SHEET 1 of 1

PROJECT: Potlatch/Avery Landing/Idaho DRILLING METHOD: HSA  
PROJECT NUMBER: 073-93312-03 DRILLING DATE: 08-28-09  
LOCATION: T45N, R5E Section 15 DRILL RIG: HSA

DATUM: NAVD 88 STATION: N/A  
ELEVATION: 2483.27 INCLINATION: -90  
COORDINATES: N: 2,035,323.08 E: 2,607,330.39

LOCATION: 143N, R02 0001113		DRILL NO: 10R		COORDINATES: N: 2,000,000.00 E: 2,007,000.00													
DEPTH (ft)	BORING METHOD	SOIL PROFILE			SAMPLES					PENETRATION RESISTANCE BLOWS / ft ■					NOTES WATER LEVELS		
		DESCRIPTION	USCS	GRAPHIC LOG	ELEV.	NUMBER	TYPE	PID Reading PPM	Sheen	REC / ATT	WATER CONTENT (PERCENT)						
					DEPTH (ft)												
											W <sub>p</sub> ——— W <sub>L</sub>						
0	HSA	0.0 - 7.0 Very dense, light brown, angular coarse GRAVEL, some sand, dry. (GP) (FILL)	GP			1	SPT	2.4	N	1.5							
5																	
7.0		7.0 - 15.0 Very dense, light brown, fine sandy SILT, some gravel, moist. (ML)	ML		2476.3 7.0	2	SPT	2.0	Y	1.5							
10																	
15		15.0 - 20.0 Very dense, grey, fine SAND, trace fine gravel, wet. (SP)  * LNAPL observed in soil at 13 ft bgs.  * Small pockets of LNAPL in sample (2cm). * Petroleum-like sheen on water surface.	SP		2468.3 15.0	3	SPT	-	Y	1.5							
20																	
20		Boring completed at 20.0 ft.			2463.3 20.0												
25																	
30																	
35																	
40																	

1 in to 5 ft  
DRILLING CONTRACTOR: Northwest  
DRILLER: B. Johnson

LOGGED: A. Cote  
CHECKED: D. Morell  
DATE:



# RECORD OF BOREHOLE BH-02

SHEET 1 of 1

PROJECT: Potlatch/Avery Landing/Idaho DRILLING METHOD: HSA  
 PROJECT NUMBER: 073-93312-03 DRILLING DATE: 08-28-09  
 LOCATION: T45N, R5E Section 15 DRILL RIG: HSA

DATUM: NAVD 88 ELEVATION: 2483.3  
 STATION: N/A INCLINATION: -90  
 COORDINATES: N: 2,035,331.93 E: 2,607,381.18

DEPTH (ft)	BORING METHOD	SOIL PROFILE			SAMPLES					PENETRATION RESISTANCE BLOWS / ft ■					NOTES WATER LEVELS		
		DESCRIPTION	USCS	GRAPHIC LOG	ELEV.	NUMBER	TYPE	PID Reading PPM	Sheen	REC / ATT	WATER CONTENT (PERCENT)						
					DEPTH (ft)												
											10	20	30	40			
W <sub>p</sub> ——— W <sub>i</sub>																	
20 40 60 80																	
0	HSA	0.0 - 6.5 Very dense, light brown, angular coarse GRAVEL, some sand, dry. (GP) (FILL)	GP			1	SPT	-	N	1.5							
5						2	SPT	-	-	1.5							
		6.5 - 7.5 Black, fine SAND, fine some fine gravel.	SP		2476.8 6.5												
		7.5 - 10.2 Very dense, brown to black streaked, fine GRAVEL, some sand, trace silt, damp. (GP)	GP		2475.8 7.5	3	SPT	2.8	-	1.5						>> ■	
10					2473.1 10.2	4	SPT	1.9	Y	1.5						>> ■	
		10.2 - 15.0 Very dense, brown silty fine GRAVEL, some sand, damp. (GM)	GM														
15			15.0 - 20.0 Very dense, grey, SAND, some fine silt, trace fine gravel, wet. (SM)  * Petroleum-like product oozing from sand.	SM		2468.3 15.0	5	SPT	21.9	Y	1.5						■ ▼
20			Boring completed at 20.0 ft.			2463.3 20.0											
25																	
30																	
35																	
40																	

ENVIRONMENTAL BOREHOLE-BB AVERY-POTLACH LOGS.GPJ BRENDAGDT 1/7/10

1 in to 5 ft  
 DRILLING CONTRACTOR: Northwest  
 DRILLER: B. Johnson

LOGGED: A. Cote  
 CHECKED: D. Morell  
 DATE:




# RECORD OF BOREHOLE BH-03

SHEET 1 of 1

PROJECT: Potlatch/Avery Landing/Idaho DRILLING METHOD: HSA  
PROJECT NUMBER: 073-93312-03 DRILLING DATE: 08-27-09  
LOCATION: T45N, R5E Section 15 DRILL RIG: HSA

DATUM: NAVD 88 STATION: N/A  
ELEVATION: 2483.53 INCLINATION: -90  
COORDINATES: N: 2,035,344.56 E: 2,607,447.83

DEPTH (ft)	BORING METHOD	SOIL PROFILE				SAMPLES					PENETRATION RESISTANCE BLOWS / ft ■				NOTES WATER LEVELS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		DESCRIPTION	USCS	GRAPHIC LOG	ELEV.	NUMBER	TYPE	PID Reading PPM	Sheen	REC / ATT	WATER CONTENT (PERCENT)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
					DEPTH (ft)						W <sub>p</sub> ——— W <sub>L</sub>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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0	HSA	0.0 - 7.5 Very dense, light brown, angular, coarse GRAVEL, some sand and wood debris, dry. (GP) (FILL)  * Dark, fine grained material at 6-7 ft bgs.	GP			1	SPT	-	N	1.5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														

ENVIRONMENTAL BOREHOLE-BB AVERY-POTLACH LOGS.GPJ BRENDAGDT 1/7/10

1 in to 5 ft  
DRILLING CONTRACTOR: Northwest  
DRILLER: B. Johnson

LOGGED: A. Cote  
CHECKED: D. Morell  
DATE:






# RECORD OF BOREHOLE BH-04

SHEET 1 of 1

PROJECT: Potlatch/Avery Landing/Idaho DRILLING METHOD: HSA  
 PROJECT NUMBER: 073-93312-03 DRILLING DATE: 08-27-09  
 LOCATION: T45N, R5E Section 15 DRILL RIG: HSA

DATUM: NAVD 88 STATION: N/A  
 ELEVATION: 2481.90 INCLINATION: -90  
 COORDINATES: N: 2,035,368.59 E: 2,607,393.18

DEPTH (ft)	BORING METHOD	SOIL PROFILE				SAMPLES					PENETRATION RESISTANCE BLOWS / ft ■				NOTES WATER LEVELS
		DESCRIPTION	USCS	GRAPHIC LOG	ELEV.	NUMBER	TYPE	PID Reading PPM	Sheen	REC / ATT	WATER CONTENT (PERCENT)				
					DEPTH (ft)						W <sub>p</sub>	W <sub>L</sub>	W <sub>i</sub>		
0	HSA	0.0 - 7.5 Very dense, light brown, angular coarse GRAVEL, some sand, dry. (GP) (FILL)	GP		2474.4	1	SPT	-	N	1.5					
5															
7.5		7.5 - 14.5 Very dense, light brown, fine to medium SAND, some coarse gravel (<2"), moist. (SP)  * At about 8' dark bluish black staining, petroleum-like odor and sheen observed.	SP		2467.4	2	SS	196	Y	1.5					
10															
14.5	HSA	14.5 - 15.0 Very dense, light brown, medium silty SAND, trace fine gravel, wet. (SM)  * Petroleum-like odor and sheen present. Boring completed at 15.0 ft.	SM		2466.9	3	SS	250	Y	1.5					
15															
20															
25															
30															
35															
40															

ENVIRONMENTAL BOREHOLE-BB AVERY-POTLACH LOGS.GPJ BRENDAGDT 1/7/10

1 in to 5 ft  
 DRILLING CONTRACTOR: Northwest  
 DRILLER: B. Johnson

LOGGED: A. Cote  
 CHECKED: D. Morell  
 DATE:



# RECORD OF BOREHOLE BH-05

SHEET 1 of 1

PROJECT: Potlatch/Avery Landing/Idaho DRILLING METHOD: HSA  
PROJECT NUMBER: 073-93312-03 DRILLING DATE: 08-27-09  
LOCATION: T45N, R5E Section 15 DRILL RIG: HSA

DATUM: NAVD 88 STATION: N/A  
ELEVATION: 2482.62 INCLINATION: -90  
COORDINATES: N: 2,035,382.28 E: 2,607,478.09

DEPTH (ft)	BORING METHOD	SOIL PROFILE				SAMPLES					PENETRATION RESISTANCE BLOWS / ft ■				NOTES WATER LEVELS
		DESCRIPTION	USCS	GRAPHIC LOG	ELEV.	NUMBER	TYPE	PID Reading PPM	Sheen	REC / ATT	WATER CONTENT (PERCENT)				
					DEPTH (ft)						10 20 30 40				
											W <sub>p</sub>   W <sub>l</sub>	W			
0	HSA	0.0 - 5.0 Very dense, light brown, angular coarse GRAVEL, some sand, dry. (GP) (FILL)	GP			1	SPT	-	N	1.5					
5		5.0 - 7.5 Very dense, brown to black, SILT, some gravel, moist. (ML)  * Petroleum-like odor and sheen present.	ML		2477.6 5.0	2	SPT	300	Y	1.5					
		7.5 - 10.0 Very dense, greyish brown, coarse GRAVEL (<2"), some sand, damp. (GP)  * Petroleum-like odor present.	GP		2475.1 7.5										
10		10.0 - 15.0 Very dense, grey, sandy SILT, some fine gravel, moist. (ML)  *Petroleum-like odor and sheen present.	ML		2472.6 10.0										
15		15.0 - 17.0 Very dense, grey, fine GRAVEL, some sand, wet. (GP)  * LNAPL observed on some gravel. * Sheen on water surface. Boring completed at 17.0 ft.	GP		2467.6 15.0	3	SS	75	Y	1.5					
20						2465.6 17.0									
25															
30															
35															
40															

ENVIRONMENTAL BOREHOLE-BB AVERY-POTLACH LOGS.GPJ BRENDAGDT 1/7/10

1 in to 5 ft  
DRILLING CONTRACTOR: Northwest  
DRILLER: B. Johnson

LOGGED: A. Cote  
CHECKED: D. Morell  
DATE:






# RECORD OF BOREHOLE GA-01

SHEET 1 of 1

PROJECT: Potlatch/Avery Landing/Idaho DRILLING METHOD: HSA  
 PROJECT NUMBER: 073-93312-03 DRILLING DATE: 08-26-09  
 LOCATION: T45N, R5E Section 16 DRILL RIG: HSA

DATUM: NAVD 88 STATION: N/A  
 ELEVATION: 2478.19 INCLINATION: -90  
 COORDINATES: N: 2,035,039.29 E: 2,606,817.87

DEPTH (ft)	BORING METHOD	SOIL PROFILE				SAMPLES				PENETRATION RESISTANCE BLOWS / ft ■				NOTES WATER LEVELS GRAPHIC			
		DESCRIPTION	USCS	GRAPHIC LOG	ELEV.	NUMBER	TYPE	PID Reading PPM	Sheen	REC / ATT	WATER CONTENT (PERCENT)						
					DEPTH (ft)						W <sub>p</sub>	W	W <sub>i</sub>				
0	HSA	0.0 - 7.5 Very dense, dark brown SAND, some angular coarse gravel, dry. (SP) (FILL)	GP			1	SPT	-	-	1.5							Concrete seal: 0-1ft. bgs.
																	Bentonite: 1-4ft. bgs.
5																	
		7.5 - 15.0 Very dense, brown, silty SAND, trace gravel, moist. (SM)	SM		2470.7 7.5	3	SPT	.3	-	1.5							
10																	
15		15.0 - 21.0 Very dense, brown, silty medium SAND, moist. (SM)  * LNAPL and sheen present.	SC		2463.2 15.0	4	SPT	30.3	Y	1.5							10/20 Carmeuse Industrial Sand
20																	
		Boring completed at 21.0 ft.			2457.2 21.0												
25																	
30																	
35																	
40																	

ENVIRONMENTAL BOREHOLE-BB AVERY-POTLACH LOGS.GPJ BRENDAGDT 1/7/10

1 in to 5 ft  
 DRILLING CONTRACTOR: Northwest  
 DRILLER: B. Johnson

LOGGED: A. Cote  
 CHECKED: D. Morell  
 DATE:



# RECORD OF BOREHOLE GA-02

SHEET 1 of 1

PROJECT: Potlatch/Avery Landing/Idaho DRILLING METHOD: HSA  
 PROJECT NUMBER: 073-93312-03 DRILLING DATE: 08-26-09  
 LOCATION: T45N, R5E Section 16 DRILL RIG: HSA

DATUM: NAVD 88 STATION: N/A  
 COORDINATES: N: 2,035,167.80 E: 2,606,235.34  
 ELEVATION: 2472.74 INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE				SAMPLES					PENETRATION RESISTANCE BLOWS / ft ■				NOTES WATER LEVELS GRAPHIC	
		DESCRIPTION	USCS	GRAPHIC LOG	ELEV.	NUMBER	TYPE	PID Reading PPM	Sheen	REC / ATT	WATER CONTENT (PERCENT)					
					DEPTH (ft)						$W_p$ — $W$ — $W_L$					
												10	20	30	40	
0	HSA	0.0 - 1.5 Loose, light brown SILT, little organics (roots), dry (ML) (TOPSOIL)	ML		2471.2	1	SPT		-	1.5						Concrete seal: 0-1.1ft. bgs.
		1.5 - 10.0 Very dense, dark brown, silty medium SAND, organics (roots), little angular coarse GRAVEL, some sand, moist. (SM)	SM		1.5											Bentonite: 1-4.1ft. bgs.
5						2	SPT		10.1	1.5						
		10.0 - 15.0 Very dense, brown SAND, little gravel, trace silt, moist. (SP)	SP		2462.7	3	SPT		-	1.5						10/20 Carmeuse Industrial Sand
10																
		15.0 - 20.0 Very dense, grey, silty medium SAND, little gravel, wet. (GP)	SM		2457.7	4	SPT		21.9	1.5						Well screen: 6-21ft. bgs.
15																
20		Boring completed at 20.0 ft.			2452.7											
					20.0											
25																
30																
35																
40																

ENVIRONMENTAL BOREHOLE-BB AVERY-POTLACH LOGS.GPJ BRENDAGDT 1/7/10

1 in to 5 ft  
 DRILLING CONTRACTOR: Northwest  
 DRILLER: B. Johnson

LOGGED: A. Cote  
 CHECKED: D. Morell  
 DATE:




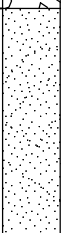



# RECORD OF BOREHOLE GA-03

SHEET 1 of 1

PROJECT: Potlatch/Avery Landing/Idaho DRILLING METHOD: HSA  
PROJECT NUMBER: 073-93312-03 DRILLING DATE: 08-26-09  
LOCATION: T45N, R5E Section 16 DRILL RIG: HSA

DATUM: NAVD 88 STATION: N/A  
COORDINATES: N: 2,035,231.33 E: 2,605,955.05  
ELEVATION: 2479.23 INCLINATION: -90

DEPTH (ft)	BORING METHOD	SOIL PROFILE				SAMPLES				PENETRATION RESISTANCE BLOWS / ft ■				NOTES WATER LEVELS GRAPHIC	
		DESCRIPTION	USCS	GRAPHIC LOG	ELEV.	NUMBER	TYPE	PID Reading PPM	Sheen	REC / ATT	WATER CONTENT (PERCENT)				
					DEPTH (ft)						W <sub>p</sub>	W <sub>L</sub>	W <sub>u</sub>		
0	HSA	0.0 - 8.0 Very dense, brown, silty angular GRAVEL, dry. (GM)	GM		2471.2	1	SPT	-	N	1.5					Concrete seal: 0-1ft. bgs.
5															
		8.0 - 13.0 Very dense, dark brown, Organic SILT, some wood debris, sand, and trace gravel, moist. (OL)	OL		8.0	3	SPT	15		1.5					
10											N	1.5			
		13.0 - 18.5 Very dense, brown, fine GRAVEL, damp. (GP)	GP		2466.2	5	SPT	56	Y	1.5					
15															
		18.5 - 25.0 Very dense, grey, fine SAND, trace silt and gravel, damp. (SP)  * Sheen present.	SP		2460.7	6	SS	21	Y	1.5					10/20 Carmeuse Industrial Sand
20															
		25.0 - 26.5 Very dense, light brown medium SAND, some fine gravel, wet. (SP)	SP		2454.2	7	SS	51		1.5					
25								2452.7							
		Boring completed at 26.5 ft.				26.5									
30															
35															
40															

ENVIRONMENTAL BOREHOLE-BB AVERY-POTLACH LOGS.GPJ BRENDAGDT 1/7/10

1 in to 5 ft  
DRILLING CONTRACTOR: Northwest  
DRILLER: B. Johnson

LOGGED: A. Cote  
CHECKED: D. Morell  
DATE:





# RECORD OF BOREHOLE GA-04

SHEET 1 of 1

PROJECT: Potlatch/Avery Landing/Idaho DRILLING METHOD: HSA  
 PROJECT NUMBER: 073-93312-03 DRILLING DATE: 08-25-09  
 LOCATION: T45N, R5E Section 16 DRILL RIG: HSA

DATUM: NAVD 88 ELEVATION: 2472.21  
 STATION: N/A INCLINATION: -90  
 COORDINATES: N: 2,035,201.52 E: 2,606,541.81

DEPTH (ft)	BORING METHOD	SOIL PROFILE				SAMPLES					PENETRATION RESISTANCE BLOWS / ft ■				NOTES WATER LEVELS GRAPHIC
		DESCRIPTION	USCS	GRAPHIC LOG	ELEV.	NUMBER	TYPE	PID Reading PPM	Sheen	REC / ATT	WATER CONTENT (PERCENT)				
					DEPTH (ft)						W <sub>p</sub>	W <sub>L</sub>	W <sub>U</sub>		
0	HSA	0.0 - 0.5 Loose, brown, silty SAND, some organics, moist. (SM)	SM		2471.7 0.5	1	SS	-	-	1.5					Concrete seal: 0-1ft. bgs.
		0.5 - 7.0 Very dense, brown, sandy GRAVEL, some pieces of concrete, dry. (GM) (FILL)	GM												Bentonite: 1-5ft. bgs.
5						2	SS	-	-	1.5					
		7.0 - 21.0 Very dense, brown, sandy medium GRAVEL, rounded, moist. (GP)	GP		2465.2 7.0										
10						3	SS		N	1.5					10/20 Carmeuse Industrial Sand
15														Well screen: 6-21ft. bgs.	
20															
		Boring completed at 21.0 ft.			2451.2 21.0										
25															
30															
35															
40															

ENVIRONMENTAL BOREHOLE-BB AVERY-POTLACH LOGS.GPJ BRENDAGDT 1/7/10

1 in to 5 ft  
 DRILLING CONTRACTOR: Northwest  
 DRILLER: B. Johnson

LOGGED: A. Cote  
 CHECKED: D. Morell  
 DATE:

